

### **What is claimed is:**

1. A multiple frequency wireless receiver for computer peripheral devices, connecting to a computer via an interface, comprising:  
a receiving unit for receiving at least two frequencies;  
5 an oscillator for generating a single oscillating signal;  
a mixer coupled to the receiving unit, and for mixing the at least two mixed signals with the single oscillating signal to obtain two mixed signals of different frequency;  
at least two filters coupled to the mixer and tuned to different  
10 frequencies to respectively allow one of the two mixed signals of different frequency to pass therethrough, and to send the respective filtered mixed signals to a mixed-signal processing unit;  
wherein the mixed-signal processing unit further processes and transforms the mixed signals into at least two commands for sending  
15 to the computer via the interface.
2. The wireless receiver as claimed in claim 1, wherein the mixed-signal processing unit further has at least two demodulation units connected to receive outputs of the respective filters, and a micro control unit for  
20 transforming the mixed signals into said at least two commands.
3. The wireless receiver as claimed in claim 1, wherein the interface includes at least a pair of PS2 ports for respectively sending at least two commands.  
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4. The wireless receiver as claimed in claim 1, wherein the interface is a USB port for sending at least two commands.
5. The wireless receiver as claimed in claim 1, wherein the first frequency  
30 is 27.045MHz, the second frequency is 27.095MHz, the oscillator generates a frequency of 26.59MHz, the first filter is tuned to 455KHz, and the second filter is tuned to 505KHz.

6. The wireless receiver as claimed in claim 1, wherein the receiver is arranged to receive wireless command signals from a wireless mouse and a wireless keyboard.